

WBS No: 1GAA0101
Activity ID: 1GAA100010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

WBS No: 1GAA0101		Title: Project Management, Oversight & Control											
Activity ID: 1GAA100010		Description: ER Program Management, Oversight & Control						Cost Risk 1		Schedule Risk 1			
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
010	ER Program Management	1.00	each	EE	689	689	36.827	31.518	0	68.345	17.972	86.317	
020	ER Program Control	1.00	each	EE	689	689	19.616	43.057	0	62.673	9.573	72.245	
030	ER Program Support	1.00	each	EE	1.378	1.378	66.185	4.600	0	70.785	32.298	103.084	
040	ER Baseline Updates	1.00	each	EE	240	240	7.007	0	0	7.007	3.420	10.427	
050	ER Hydrogeology Issue Management	1.00	each	EE	304	304	8.986	40.999	0	49.985	4.385	54.370	
Total for Activity 1GAA100010:						3.300	138.622	120.174	0	258.796	67.647	326.443	

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020) is required from June through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours remaining (Jun-Sep) 729 Hrs - 40 Hrs TOWP = 689 Hrs

One ER Administrative Support person (G010) from July through September accounting months. Estimated hours are calculated as follows:
Schedule working hours remaining (Jul-Sep) = 660 Hrs

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources			Cost Element	Skill	Department	Curve	Quantity	Units
			750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K265S ER Programs	Linear	689.00	Hours
			Factors 1 Program Manager	689 729 Sched Hrs - 40 Vac Hrs				
			A52 TENERA	G010 ADMINISTRATIVE ASSISTANTS	K265S ER Programs	Linear	29,040.00	Dollars
			Factors 1 Admin Support	660 Hrs	44 Dollars/hour			
			A5H SUBCONTRACTED SRVS	0000 NONE	K265S ER Programs	Linear	127.60	Dollars
			Factors 11 digital pagers	2.9 Dollars/pager/month	4 months			
			A5H SUBCONTRACTED SRVS	0000 NONE	K265S ER Programs	Linear	50.40	Dollars
			Factors 2 alpha pagers	6.3 Dollars/pager/month	4 months			
			A5H SUBCONTRACTED SRVS	0000 NONE	K265S ER Programs	Back Loaded	0.00	Dollars
			Factors 0 Video tape production	13025 Dollars per production				
			A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K265S ER Programs	Bell Shaped	2,300.00	Dollars
			Factors 1 Trip	2300 Dollars per trip				

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070) is required from June through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours remaining (Jun-Sep) 729 Hrs - 40 Hrs TOWP = 689 Hrs

One ER Project Control Support person (P070) is required from June through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours remaining (Jun-Sep) 729 Hrs - 40 Hrs TOWP = 689 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. System specifications and pricing as follows:
Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690
Monitor: Dell P991 (18" Viewable) - \$517
Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600

Resources			Cost Element	Skill	Department	Curve	Quantity	Units
			750 STRAIGHT TIME BASE	P070 COST ESTIMATORS PLANNERS AN	K265S ER Programs	Linear	689.00	Hours
			Factors 1 Program Control Man	689 729 Sch working Hrs - 40 Hrs Vac				

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A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Linear	6,400.00	Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	4	Months		
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2,207.00	Dollars
Factors	1	Computer system	2207	Dollars per system				
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	34,450.00	Dollars
Factors	1	Project Cntrl Support	689	729 Sch working Hrs - 40 Hrs Vac	50	dollars/hr		

Line Item 030 - ER Program Support

BOE	One ER Technical Support Manager (M020) is required from June through September accounting months. Estimated hours are calculated as follows: Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs							
	One ER Field Operations Manager (M030) is required from June through September accounting months. Estimated hours are calculated as follows: Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs							
	Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300							

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	689.00	Hours
Factors	1	Technical Support Mar	689	729 Sch Work Hrs - 40 Hrs Vac					
	750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs	Linear	689.00	Hours
Factors	1	Field Operations Mar	689	729 Sch Work Hrs - 40 Hrs Vac					
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	4,600.00	Dollars
Factors	2	Trips	2300	Dollars/trip					

Line Item 040 - ER Baseline Updates

BOE	2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 20 hours per week for 4 weeks per person.							
	1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 20 hours per week for 4 weeks.							

Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS		R100S	RMRS Salaried	Front Loaded	160.00	Hours
	Factors	2	Environmental Engineers	80	hours per month		1	month			
	750	STRAIGHT TIME BASE		P070	COST ESTIMATORS PLANNERS AN		R100S	RMRS Salaried	Front Loaded	80.00	Hours
	Factors	1	Project Control Support	80	hours per month		1	month			

Line Item 050 - ER Hydrogeology Issue Management

BOE	ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week for the June through September accounting months.							
	Estimated hours are calculated as follows: 24 hours per week x 19 weeks (June through September accounting months) = 456 hours 16 hours per week x 19 weeks (June through September accounting months) = 304 hours							

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	304.00	Hours
	Factors	16	Hours per week	19	weeks					
	A5H	SUBCONTRACTED SRVS		S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear	40,998.96	Dollars
	Factors	24	Hours per week	19	weeks	89.91	per hour			

Activity ID: 1GAA100020 Description: ER Program Management, Oversight & Control

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Program Management	1.00	each	EE	1,898	1,898	101,448	103,131	0	204,579	48,391	252,970
020	ER Program Control	1.00	each	EE	1,898	1,898	54,036	129,157	0	183,193	25,775	208,968
030	ER Program Support	1.00	each	EE	3,796	3,796	182,322	4,600	0	186,922	86,968	273,889
040	ER Baseline Updates	1.00	each	EE	360	360	10,511	0	0	10,511	5,014	15,524
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24,594	112,208	0	136,802	11,731	148,533

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SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	47.604	47.604	0	47.604
Total for Activity 1GAA100020:						8.784	372.911	349.096	47.604	769.611	177.878	947.489

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Manager	1898	Hrs per year				
A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
Factors	1	Admin Support	1938	Hrs per year	44	Dollars/hour		
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2.000.00	Dollars
Factors	2	GIS Software Upgrades	1000	Dollars / upgrade				
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	382.80	Dollars
Factors	11	digital pagers	2.9	Dollars/pager/month	12	months		
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	151.20	Dollars
Factors	2	alpha pagers	6.3	Dollars/pager/month	12	months		
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Back Loaded	13.025.00	Dollars
Factors	1	Video tape production	13025	Dollars per production				
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1	Trip	2300	Dollars per trip				

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:
Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690
Monitor: Dell P991 (18" Viewable) - \$517
Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

The ER Program will be required to purchase printers for the program. The printer cost was taken from the Computer Support internet site and is priced as follows:
HP 8000 DN Printer (High Volume) \$6,110
HP Color LaserJet 4500DN (Medium Volume) \$4,440

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Control Mar	1898	Hrs per year					
A5C	SUPPLIES		0000	NONE	K265S	ER Programs	Linear	19.200.00	Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	12	Months			
A5C	SUPPLIES		0000	NONE	K265S	ER Programs	Back Loaded	2.207.00	Dollars
Factors	1	Computer svstem	2207	Dollars per svstem					
A5C	SUPPLIES		0000	NONE	K265S	ER Programs	Front Loaded	10.550.00	Dollars
Factors	10550	Dollars/printers							
A5H	SUBCONTRACTED SRVS		P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94.900.00	Dollars
Factors	1	Project Cntrl Support	1898	Hrs per year	50	dollars/hr			
A5M	TRAVEL/TRAIN/RELOCAT		0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1	Trip	2300	Dollars per trip					

Line Item 030 - ER Program Support

BOE	One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300								
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1	Technical Support Mgr	1898	Hrs per year				
	750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1	Field Operations Mgr	1898	Hrs per year				
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	4.600.00	Dollars
	Factors	2	Trips	2300	Dollars/trip				

Line Item 040 - ER Baseline Updates

BOE	2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person. 1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.								
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS		R100S	RMRS Salaried	Back Loaded	240.00	Hours
	Factors	2	Environmental Engineers		10	hours per week		12	weeks		
	750	STRAIGHT TIME BASE		P070	COST ESTIMATORS PLANNERS AN		R100S	RMRS Salaried	Back Loaded	120.00	Hours
	Factors	1	Project Control Support		10	hours per week		12	weeks		

Line Item 050 - ER Hydrogeology Issue Management

BOE	ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week. Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours								
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	832.00	Hours
	Factors	16	Hours per week	52	weeks					
	A5H	SUBCONTRACTED SRVS		S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear	112,207.70	Dollars
	Factors	24	Hours per week	52	weeks		89.91 per hour			

Line Item SYS - Contingency And Escalation

BOE

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	28.681.51	Dollars
<i>Factors</i> 28681.5 Dollars									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	18.922.57	Dollars
<i>Factors</i> 18922.6 Dollars									

Activity ID: 1GAA100030 Description: ER Program Management, Oversight & Control

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Program Management	1.00	each	EE	1.898	1.898	101.448	101.131	0	202.579	35.811	238.390
020	ER Program Control	1.00	each	EE	1.898	1.898	54.036	123.607	0	177.643	19.075	196.718
030	ER Program Support	1.00	each	EE	3.796	3.796	182.322	4.600	0	186.922	64.360	251.282
040	ER Baseline Updates	1.00	each	EE	360	360	10.511	0	0	10.511	3.710	14.221
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24.594	112.208	0	136.802	8.682	145.483
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	126.134	126.134	0	126.134
Total for Activity 1GAA100030:						8.784	372.911	341.546	126.134	840.591	131.638	972.228

Line Item 010 - ER Program Management

BOE	One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025 Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193). Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
<i>Factors</i> 1 Program Manager 1898 Hrs per year									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
<i>Factors</i> 1 Admin Support 1938 Hrs per year 44 Dollars/hour									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	382.80	Dollars
<i>Factors</i> 11 digital pagers 2.9 Dollars/pager/month 12 months									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	151.20	Dollars
<i>Factors</i> 2 alpha pagers 6.3 Dollars/pager/month 12 months									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Back Loaded	13.025.00	Dollars
<i>Factors</i> 1 Video tape production 13025 Dollars per production									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00	Dollars
<i>Factors</i> 1 Trip 2300 Dollars per trip									

Line Item 020 - ER Program Control

BOE	One ER Program Control Manager (P070) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Project Control Support person (P070) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows: Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690 Monitor: Dell P991 (18" Viewable) - \$517 Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange
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Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources		Cost Element		Skill		Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Control Mgr		1898	Hrs per year				
A5C		SUPPLIES	0000	NONE	K265S	ER Programs	Linear	19.200.00	Dollars
Factors	16	Project personnel		100	Dollars supplies/month/person	12	Months		
A5C		SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2.207.00	Dollars
Factors	1	Computer system		2207	Dollars per system				
A5H		SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94.900.00	Dollars
Factors	1	Project Cntrl Support		1898	Hrs per year	50	dollars/hr		
A5M		TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Linear	5.000.00	Dollars
Factors	2500	Dollars/semester		2	Semesters/year				
A5M		TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1	Trip		2300	Dollars per trip				

Line Item 030 - ER Program Support

BOE	One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs								
	One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs								
	Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300								

Resources		Cost Element		Skill		Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Technical Support Mgr		1898	Hrs per year				
750		STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Field Operations Mgr		1898	Hrs per year				
A5M		TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	4.600.00	Dollars
Factors	2	Trips		2300	Dollars/trip				

Line Item 040 - ER Baseline Updates

BOE	2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.								
	1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.								

Resources		Cost Element		Skill		Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Max Backload	240.00	Hours
Factors	2	Environmental Engineers		10	hours per week	12	weeks		
750		STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Max Backload	120.00	Hours
Factors	1	Project Control Support		10	hours per week	12	weeks		

Line Item 050 - ER Hydrogeology Issue Management

BOE	ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.								
	Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours								

WBS No: 1GAA0101
Activity ID: 1GAA100030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	832.00	Hours
Factors	16	Hours per week	52	weeks					
A5H		SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear	112.207.70	Dollars
Factors	24	Hours per week	52	weeks	89.91	per hour			

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
CON		CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	86.595.07	Dollars
Factors	86595.1	Dollars							
ESC		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	39.539.19	Dollars
Factors	39539.2	Dollars							

Activity ID: 1GAA100040 Description: ER Program Management, Oversight & Control

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Program Management	1.00	each	EE	1.898	1.898	101.448	103.131	0	204.579	35.101	239.680
020	ER Program Control	1.00	each	EE	1.898	1.898	54.036	123.607	0	177.643	18.696	196.340
030	ER Program Support	1.00	each	EE	3.796	3.796	182.322	4.600	0	186.922	63.083	250.005
040	ER Baseline Updates	1.00	each	EE	360	360	10.511	0	0	10.511	3.637	14.148
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24.594	112.208	0	136.802	8.509	145.311
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	233.821	233.821	0	233.821
Total for Activity 1GAA100040:						8.784	372.911	343.546	233.821	950.277	129.027	1.079.305

Line Item 010 - ER Program Management

BOE	One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00. Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025 Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193). Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300
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Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Manager	1898	Hrs per year					
A52		TENERA	G010	ADMINISTRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
Factors	1	Admin Support	1938	Hrs per year	44	Dollars/hour			
A5C		SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2.000.00	Dollars
Factors	2	GIS Software Upgrades	1000	Dollars / upgrade					
A5H		SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	382.80	Dollars
Factors	11	digital pagers	2.9	Dollars/pager/month	12	months			
A5H		SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	151.20	Dollars
Factors	2	alpha pagers	6.3	Dollars/pager/month	12	months			
A5H		SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Back Loaded	13.025.00	Dollars
Factors	1	Video tape production	13025	Dollars per production					
A5M		TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1	Trip	2300	Dollars per trip					

WBS No: 1GAA0101
Activity ID: 1GAA100040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

Line Item 020 - ER Program Control

BOE	One ER Program Control Manager (P070) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs
	One ER Project Control Support person (P070) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs
	It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows: Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690 Monitor: Dell P991 (18" Viewable) - \$517 Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange
	Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600
	Estimated tuition expense: \$2500/semester
	Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300

Resources		Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear		1.898.00	Hours
Factors	1	Program Control Mar	1898	Hrs per year					
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Linear		19.200.00	Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	12	Months			
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded		2.207.00	Dollars
Factors	1	Computer system	2207	Dollars per system					
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear		94.900.00	Dollars
Factors	1	Project Cntrl Support	1898	Hrs per year	50	dollars/hr			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Linear		5.000.00	Dollars
Factors	2500	Dollars/semester	2	Semesters/year					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped		2.300.00	Dollars
Factors	1	Trip	2300	Dollars per trip					

Line Item 030 - ER Program Support

BOE	One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs					
	One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs					
	Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300					

Resources		Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear		1.898.00	Hours
Factors	1	Technical Support Mar	1898	Hrs per year					
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs	Linear		1.898.00	Hours
Factors	1	Field Operations Mar	1898	Hrs per year					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped		4.600.00	Dollars
Factors	2	Trips	2300	Dollars/trip					

Line Item 040 - ER Baseline Updates

BOE	2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.					
	1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.					

Resources		Cost Element		Skill		Department	Curve	Quantity	Units
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WBS No: 1GAA0101
Activity ID: 1GAA100040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Max Backload	240.00	Hours
Factors	2	Envrionmental Engineers	10	hours per week	12	weeks		
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Max Backload	120.00	Hours
Factors	1	Project Control Support	10	hours per week	12	weeks		

Line Item 050 - ER Hydrogeology Issue Management

BOE
ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows:
24 hours per week x 52 weeks = 1248 hours
16 hours per week x 52 weeks = 832 hours

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	832.00	Hours
Factors	16	Hours per week	52	weeks				
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear	112.207.70	Dollars
Factors	24	Hours per week	52	weeks	89.91	per hour		

Line Item SYS - Contingency And Escalation

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	168.984.90	Dollars
Factors	168985	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	64.836.13	Dollars
Factors	64836.1	Dollars						

Activity ID: 1GAA100050 Description: ER Program Management, Oversight & Control

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Program Management	1.00	each	EE	1.898	1.898	101.448	101.131	0	202.579	28.608	231.187
020	ER Program Control	1.00	each	EE	1.898	1.898	54.036	123.607	0	177.643	15.238	192.881
030	ER Program Support	1.00	each	EE	3.796	3.796	182.322	4.600	0	186.922	51.415	238.337
040	ER Baseline Updates	1.00	each	EE	180	180	5,255	0	0	5,255	1.482	6,737
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24,594	112,208	0	136,802	6,935	143,737
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	115.847	115,847	0	115,847
Total for Activity 1GAA100050:						8.604	367.655	341.546	115.847	825.048	103.679	928.727

Line Item 010 - ER Program Management

BOE
One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 12 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Manager	1898	Hrs per year				
A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
Factors	1	Admin Support	1938	Hrs per year	44	Dollars/hour		

WBS No: 1GAA0101
Activity ID: 1GAA100050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Linear	382.80	Dollars
Factors	11	digital pagers	2.9	Dollars/pager/month	12	months			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Linear	151.20	Dollars
Factors	2	alpha pagers	6.3	Dollars/pager/month	12	months			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Back Loaded	13,025.00	Dollars
Factors	1	Video tape production	13025	Dollars per production					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	2,300.00	Dollars
Factors	1	Trip	2300	Dollars per trip					

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:
Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690
Monitor: Dell P991 (18" Viewable) - \$517
Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	1,898.00	Hours
Factors	1	Program Control Mar	1898	Hrs per year				
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Linear	19,200.00	Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	12	Months		
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2,207.00	Dollars
Factors	1	Computer system	2207	Dollars per system				
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94,900.00	Dollars
Factors	1	Project Cntrl Support	1898	Hrs per year	50	dollars/hr		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Linear	5,000.00	Dollars
Factors	2500	Dollars/semester	2	Semesters/year				
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2,300.00	Dollars
Factors	1	Trip	2300	Dollars per trip				

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1,898.00	Hours
Factors	1	Technical Support Mar	1898	Hrs per year				
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs	Linear	1,898.00	Hours
Factors	1	Field Operations Mar	1898	Hrs per year				

WBS No: 1GAA0101
Activity ID: 1GAA100050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	4.600.00	Dollars
Factors	2	Trips	2300	Dollars/trip				

Line Item 040 - ER Baseline Updates

BOE
2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.
1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Max Backload
Factors	2	Envrionmental Engineers	10	hours per weeks	6	weeks
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Max Backload
Factors	1	Project Control Support	10	hours per weeks	6	weeks

Line Item 050 - ER Hydrogeology Issue Management

BOE
ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.
Estimated hours are calculated as follows:
24 hours per week x 52 weeks = 1248 hours
16 hours per week x 52 weeks = 832 hours

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear
Factors	16	Hours per week	52	weeks		
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear
Factors	24	Hours per week	52	weeks	89.91	per hour

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear
Factors	37797.4	Dollars			37.797.44	Dollars
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear
Factors	78049.7	Dollars			78.049.70	Dollars

Activity ID: 1GAA100060 Description: ER Program Management, Oversight & Control

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Program Management	1.00	each	EE	1.898	1.898	101.448	103.131	0	204.579	35.304	239.883
020	ER Program Control	1.00	each	EE	1.898	1.898	54.036	123.607	0	177.643	18.805	196.448
030	ER Program Support	1.00	each	EE	3.796	3.796	182.322	4.600	0	186.922	63.448	250.370
040	ER Baseline Updates	1.00	each	EE	90	90	2.628	0	0	2.628	914	3.542
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24.594	112.208	0	136.802	8.559	145.360
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	445.868	445.868	0	445.868
Total for Activity 1GAA100060:						8.514	365.028	343.546	445.868	1.154.442	127.030	1.281.471

Line Item 010 - ER Program Management

BOE
One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

WBS No: 1GAA0101
Activity ID: 1GAA100060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00 Hours
Factors	1	Program Manager	1898	Hrs per year			
A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00 Dollars
Factors	1	Admin Support	1938	Hrs per year	44	Dollars/hour	
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2.000.00 Dollars
Factors	2	GIS Software Upgrades	1000	Dollars / upgrade			
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	382.80 Dollars
Factors	11	digital pagers	2.9	Dollars/pager/month	12	months	
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	151.20 Dollars
Factors	2	alpha pagers	6.3	Dollars/pager/month	12	months	
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Back Loaded	13.025.00 Dollars
Factors	1	Video tape production	13025	Dollars per production			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00 Dollars
Factors	1	Trip	2300	Dollars per trip			

Line Item 020 - ER Program Control

BOE	One ER Program Control Manager (P070) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Project Control Support person (P070) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows: Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690 Monitor: Dell P991 (18" Viewable) - \$517 Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600 Estimated tuition expense: \$2500/semester Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00 Hours
Factors	1	Program Control Mgr	1898	Hrs per year			
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Linear	19.200.00 Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	12	Months	
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Back Loaded	2.207.00 Dollars
Factors	1	Computer system	2207	Dollars per system			
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94.900.00 Dollars
Factors	1	Project Cntrl Support	1898	Hrs per year	50	dollars/hr	
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Linear	5.000.00 Dollars
Factors	2500	Dollars/semester	2	Semesters/year			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	2.300.00 Dollars
Factors	1	Trip	2300	Dollars per trip			

Line Item 030 - ER Program Support

BOE	One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs
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WBS No: 1GAA0101
Activity ID: 1GAA100060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S ER Programs	Linear	1.898.00	Hours
Factors	1	Technical Support Mar	1898	Hrs per year			
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S ER Programs	Linear	1.898.00	Hours
Factors	1	Field Operations Mar	1898	Hrs per year			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S ER Programs	Bell Shaped	4.600.00	Dollars
Factors	2	Trips	2300	Dollars/trip			

Line Item 040 - ER Baseline Updates

BOE	2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.
	1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Max Backload	60.00	Hours
Factors	2	Envrionmental Engineers	10	hours per week	3	weeks	
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	R100S RMRS Salaried	Max Backload	30.00	Hours
Factors	1	Project Control Support	10	hours per week	3	weeks	

Line Item 050 - ER Hydrogeology Issue Management

BOE	ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.
	Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	832.00	Hours
Factors	16	Hours per week	52	weeks			
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	K265S ER Programs	Linear	112,207.70	Dollars
Factors	24	Hours per week	52	weeks	89.91	per hour	

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	316.420.70	Dollars
	Factors		316421 Dollars							
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	129.447.80	Dollars
	Factors		129448 Dollars							

Activity ID: 1GAA100070 Description: End of ER Program Maanagement. Oversight & Control

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Prooram Management	1.00	each	EE	428	428	22.877	18.966	0	41.842	28.404	70.246
020	ER Program Control	1.00	each	EE	428	428	12.185	26.200	0	38.385	15.129	53.514
030	ER Program Support	1.00	each	EE	856	856	41.114	0	0	41.114	51.047	92.161
050	ER Hvdrogeology Issue Management	1.00	each	EE	160	160	4.730	21.578	0	26.308	5.872	32.180
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	99.426	99.426	0	99.426
Total for Activity 1GAA100070:						1.872	80.905	66.744	99.426	247.074	100.452	347.527

WBS No: 1GAA0101
Activity ID: 1GAA100070

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

Line Item 010 - ER Program Management

BOE One ER Program Manager (M020) is required from October through December accounting months. Estimated hours are calculated as follows:
Scheduled working hours (Oct - Dec) ~ 428 Hours

One ER Administrative Support person (G010) from October through December accounting months. Estimated hours are calculated as follows:
Scheduled working hours (Oct - Dec) ~ 428 Hours

Pagers: ER has 13 personnel with pagers, 12 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	428.00	Hours
Factors	1	Program Manager	428	Hours				
A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	K265S	ER Programs	Linear	18,832.00	Dollars
Factors	1	Admin Support	428	Hours	44	Dollars/hour		
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	95.70	Dollars
Factors	11	digital pagers	2.9	Dollars/pager/month	3	months		
A5H	SUBCONTRACTED SRVS	0000	NONE	K265S	ER Programs	Linear	37.80	Dollars
Factors	2	alpha pagers	6.3	Dollars/pager/month	3	months		

Line Item 020 - ER Program Control

BOE One ER Program Control Manager (P070) is required from October through December accounting months. Estimated hours are calculated as follows:
Scheduled working hours (Oct - Dec) ~ 428 Hrs

One ER Project Control Support person (P070) is required from October through December accounting months. Estimated hours are calculated as follows:
Scheduled working hours (Oct - Dec) ~ 428 Hrs

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	428.00	Hours
Factors	1	Program Control Mar	428	Hours				
A5C	SUPPLIES	0000	NONE	K265S	ER Programs	Linear	4,800.00	Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	3	Months		
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	21,400.00	Dollars
Factors	1	Project Cntrl Support	428	Hours	50	dollars/hr		

Line Item 030 - ER Program Support

BOE One ER Technical Support Manager (M020) is required from October through December accounting months. Estimated hours are calculated as follows:
Scheduled working hours (Oct - Dec) ~ 428 Hrs

One ER Field Operations Manager (M030) is required from October through December accounting months. Estimated hours are calculated as follows:
Scheduled working hours (Oct - Dec) ~ 428 Hrs

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	428.00	Hours
Factors	1	Technical Support Mar	428	Hours				
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs	Linear	428.00	Hours
Factors	1	Field Operations Mar	428	Hours				

Line Item 050 - ER Hydrogeology Issue Management

BOE ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows:
24 hours per week x 10 weeks = 240 hours
16 hours per week x 10 weeks = 160 hours

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	160.00	Hours
Factors	16	Hours per week	10	weeks				

WBS No: 1GAA0101
Activity ID: 1GAA100070

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear	21.578.40	Dollars
Factors	24	Hours per week	10	weeks	89.91	per hour		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	52.963.87	Dollars
Factors	52963.9 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	46.461.63	Dollars
Factors	46461.6 Dollars							

Activity ID: 1GXXX1006 Description: ER Program Management, Oversight & Control fv06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
010	ER Program Management	0.96	each	EE	1.898	1.831	97.889	99.512	0	197.401	34.065	231.466
020	ER Program Control	0.96	each	EE	1.898	1.831	52.140	119.270	0	171.410	18.145	189.555
030	ER Program Support	0.96	each	EE	3.796	3.663	175.925	4.439	0	180.363	61.222	241.585
040	ER Baseline Updates	0.96	each	EE	90	87	2.536	0	0	2.536	882	3.418
050	ER Hydrogeology Issue Management	0.96	each	EE	832	803	23.731	108.271	0	132.002	8.258	140.260
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	682.584	682.584	0	682.584
Total for Activity 1GXXX1006:						8.215	352.220	331.491	682.584	1.366.296	122.572	1.488.868

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

Cost Element			Skill		Department		Curve	Quantity	Units	
750	STRAIGHT TIME BASE		M020	MANAGERS (GRADE 69 - 72)		K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Manager		1898	Hrs per year					
A52	TENERA		G010	ADMINISTRATIVE ASSISTANTS		K265S	ER Programs	Linear	85.272.00	Dollars
Factors	1	Admin Support		1938	Hrs per year		44	Dollars/hour		
A5C	SUPPLIES		0000	NONE		K265S	ER Programs	Back Loaded	2.000.00	Dollars
Factors	2	GIS Software Upgrades		1000	Dollars / upgrade					
A5H	SUBCONTRACTED SRVS		0000	NONE		K265S	ER Programs	Linear	382.80	Dollars
Factors	11	digital pagers		2.9	Dollars/pager/month		12	months		
A5H	SUBCONTRACTED SRVS		0000	NONE		K265S	ER Programs	Linear	151.20	Dollars
Factors	2	alpha pagers		6.3	Dollars/pager/month		12	months		
A5H	SUBCONTRACTED SRVS		0000	NONE		K265S	ER Programs	Back Loaded	13.025.00	Dollars
Factors	1	Video tape production		13025	Dollars per production					
A5M	TRAVEL/TRAIN/RELOCAT		0000	NONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1	Trip		2300	Dollars per trip					

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

WBS No: 1GAA0101
Activity ID: 1GXXX1006

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

One ER Project Control Support person (P070) is required from October through September accounting months. Estimated hours are calculated as follows:
Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:
Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690
Monitor: Dell P991 (18" Viewable) - \$517
Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows: 16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Program Control Mar	1898	Hrs per year					
A5C	SUPPLIES	0000	NONE		K265S	ER Programs	Linear	19.200.00	Dollars
Factors	16	Project personnel	100	Dollars supplies/month/person	12	Months			
A5C	SUPPLIES	0000	NONE		K265S	ER Programs	Back Loaded	2.207.00	Dollars
Factors	1	Computer svstem	2207	Dollars per system					
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried		Linear	94.900.00	Dollars
Factors	1	Project Cntrl Support	1898	Hrs per year	50	dollars/hr			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Linear	5.000.00	Dollars
Factors	2500	Dollars/semester	2	Semesters/year					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1	Trip	2300	Dollars per trip					

Line Item 030 - ER Program Support

BOE	One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs								
	One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs								
	Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300								

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1	Technical Support Mar	1898	Hrs per year					
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K265S	ER Programs		Linear	1.898.00	Hours
Factors	1	Field Operations Mar	1898	Hrs per year					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	4.600.00	Dollars
Factors	2	Trips	2300	Dollars/trip					

Line Item 040 - ER Baseline Updates

BOE	2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.								
	1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.								

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Max Backload	60.00	Hours
Factors	2	Envrionmental Engineers	10	hours per week	3	weeks			

WBS No: 1GAA0101
Activity ID: 1GXXX1006

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1GAA
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Max Backload	30.00	Hours
Factors	1	Project Control Support	10	hours per week	3	weeks		

Line Item 050 - ER Hydrogeology Issue Management

BOE

ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows:
24 hours per week x 52 weeks = 1248 hours
16 hours per week x 52 weeks = 832 hours

Resources

Cost Element			Skill		Department		Curve	Quantity	Units	
750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS		R100S	RMRS Salaried	Linear	832.00	Hours
Factors	16	Hours per week		52	weeks					
A5H	SUBCONTRACTED SRVS		S020	ENVIRONMENTAL SCIENTISTS		K265S	ER Programs	Linear	112,207.70	Dollars
Factors	24	Hours per week		52	weeks		89.91 per hour			

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	502.742.80	Dollars
Factors	502743 Dollars								
ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	179.841.70	Dollars
Factors	179842 Dollars								

Report Totals:

Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
56.857	2,423.162	2,237.688	1,751.285	6,412.134	959.924	7,372.058